REMARKS

Favorable reconsideration of this application, in view of the following remarks, is respectfully requested.

Claims 1-17 are pending in the present application, and claims 1-8 and 10-17 are amended by the present Response.

As an initial matter, Applicant thanks the Examiner for the early indication of allowable subject matter with regard to allowed claims 4-13 and 15-17; for withdrawing the rejections under obviousness-type double patenting set forth in the previous Office Action; and for making the outstanding Office Action non-final in light of the new grounds of rejection. Applicant also respectfully requests that consideration of the materials cited in the Information Disclosure Statement filed March 9, 2005, be acknowledged in the next Office Communication by returning an initialed and signed copy of the Form PTO-1449 filed therewith.

Rejections under 35 USC § 103

In the outstanding Office Action, claims 1 and 2 were rejected under 35 USC § 103(a) in view of US Patent No. 6,381,974 to HWANG *et al.* (herein "HWANG"); claim 1 was rejected under 35 USC § 103(a) in view of US Patent No. 5,927,093 to NOGUCHI *et al.* (herein "NOGUCHI"); and claims 3 and 14 were rejected under 35 USC § 103(a) in view of HWANG and US Patent No. 6,189,335 to EBARA *et al.* (herein "EBARA"). These rejections are respectfully traversed.

Amended independent claim 1 recites, *inter alia*,

> ... at least two distributors between the outdoor unit and the plurality of indoor units for improving installation freedom of the plurality of indoor units, and configured to selectively guide refrigerant from the outdoor unit to the plurality of indoor units proper to operation conditions, and to guide the refrigerant passed through the indoor units to the outdoor unit again, each of the distributors further configured to distribute the refrigerant to at least two of the plurality of indoor units...

Amended independent claim 14 sets forth similar features.

In contrast, as acknowledged at page 3, lines 8-10, at page 4, lines 5-7, and at page 5, lines 7-9, neither HWANG, NOGUCHI nor EBARA—either singly or in any proper combination thereof—disclose a plurality of distributors and indoor units.

Furthermore, it is respectfully submitted that having "at least two distributors between the outdoor unit and the plurality of indoor units for improving installation freedom of the plurality of indoor units," as recited in pending independent claims 1 and 14, corresponds to substantial and novel results and therefore cannot properly be described as mere duplication of parts.

In a non-limiting example, since the multi-type air conditioner (as set forth in pending independent claim 1, for example) is provided with a plurality of distributors and refrigerant supercooling devices, freedom of installation and air conditioning efficiency can be improved (see the specification at paragraph [0031], for example). Also, such freedom of installation, provided by the existence of two or more distributors, permits the structure of the connections of pipelines guiding refrigerant to be much simpler, and therefore installation of

such a multi-type air conditioner can be facilitated when, for example, the room is large and room structure is complex (see the specification at paragraph [0097]). In contrast, neither HWANG, NOGUCHI nor EBARA disclose such features, nor would one of ordinary skill in the appropriate art have been motivated to modify HWANG, NOGUCHI or EBARA in the manner suggested by the Examiner in the outstanding Office Action.

In addition, it is respectfully submitted such results are unexpected at least because of the fact that although a multi-type air conditioner which includes two or more distributors might be assumed to constrain installation of the air-conditioner (when contrasted with an air conditioner having only one distributor), because an increase of interconnections therebetween might be anticipated to require rigid placement procedures, in fact the multi-type air conditioner as set forth in pending independent claims 1 and 14 can instead *facilitate* air conditioner installation and/or *improve* freedom of installation.

Accordingly, it is respectfully submitted that the features of "at least two distributors between the outdoor unit and the plurality of indoor units for improving installation freedom of the plurality of indoor units," as recited in pending independent claims 1 and 14, are not mere duplication of parts per the decision in *In re Harza*; that neither HWANG, NOGUCHI nor EBARA teach or suggest such features; and that therefore, pending independent claims 1 and 14, and each of the claims depending therefrom, patentably distinguish over HWANG, NOGUCHI and EBARA. It is thus respectfully requested the rejections in view of HWANG, NOGUCHI and EBARA each be withdrawn.

Moreover, amended independent claim1 recites, *inter alia*,

> a shut-off device configured to selectively shut off introduction of the refrigerant into each distributor,
> wherein the shut-off device shuts off the refrigerant into the each distributor when all of the indoor units connected to each distributor are inoperative.

Similarly, amended independent claim 14 recites, *inter alia*,

> ... an ON/OFF valve configured to selectively shut off introduction of the refrigerant into each distributor,
> wherein the ON/OFF valve shuts off the refrigerant into the each distributor when all of the indoor units connected to each distributor are inoperative.

Support for such features is found at least in FIG. 2 and in the specification at paragraphs [0044], [0045], [0056], [0057], and [0097], for example.

In a non-limiting example, air conditioning efficiency can be improved because introduction of refrigerant into the distributors is shut off in advance by the operation of the shut-off device or the ON/OFF valve when all of the indoor units connected to the distributor are inoperative (see the specification at paragraph [0097]).

In contrast, although HWANG discusses a refrigerant flow controller M, the refrigerant flow controller M must be provided in a branching pipe 134 because in HWANG, at least one of three blocks a, b, and c of the external heat exchanger 110 have to operate during the operation of the heat pump. Therefore, the function and principle of operation of the refrigerant flow controller M of HWANG is different from a shut-off device or an ON/OFF valve which "shuts off the refrigerant into the each distributor when all of the indoor units connected

to each distributor are inoperative," as recited in amended independent claims 1 and 14, for example. Neither NOGUCHI nor EBARA disclose such features, either.

Accordingly, it is respectfully submitted that HWANG, NOGUCHI and EBARA, either singly or in any proper combination thereof, do not disclose all the features recited in amended independent claims 1 and 14; and thus amended independent claims 1 and 14, and each of the claims depending therefrom, patentably distinguish over HWANG, NOGUCHI and EBARA. Therefore, it is respectfully requested the rejections in view thereof set forth in the outstanding Office Action also be withdrawn for this further reason.

No *prima facie* case of obviousness established

Also, it is respectfully submitted the rejections under 35 USC § 103(a) set forth in the outstanding Office Action are improper, because a *prima facie* case of obviousness has not been made. In particular, MPEP § 2143 states, *inter alia*:

> To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Therefore, even assuming the decision in *In re Harza* has any relevance to the present application in view of the comments noted in the outstanding Office Action, nonetheless a rejection under 35 USC § 103(a) must set forth some

motivation to modify the cited references in the manner suggested in the outstanding Office Action.

However, although the outstanding Office Action states that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Hwang, by adding a plurality of said distributors and indoor units to maximize the capacitance of the indoor heat exchangers," it is respectfully submitted the outstanding Office Action nonetheless does not point out why maximizing the capacitance of indoor heat exchangers would be a motivation, in view of the prior art, to modify the cited references in the manner suggest in the outstanding Office Action. Rather, it is respectfully submitted that capacitance—defined as "the ratio of charge to potential on an electrically charged, isolated conductor" by *The American Heritage® Dictionary of the English Language, Fourth Edition*, 2000, Houghton Mifflin—in fact has little or no correlation to a multi-type air conditioner having at least two distributors "configured to selectively guide refrigerant," as recited in pending independent claims 1 and 14, for example.

Accordingly, because there is little or no correlation between maximizing capacitance of indoor heat exchangers (as suggested in the outstanding Office Action) on the one hand, and a multi-type air conditioner having "two or more distributors ... configured to selectively guide refrigerant" (as set forth in pending independent claims 1 and 14) on the other hand, there in fact would not have been any motivation to a person having ordinary skill in the art at the time the invention was made to have modified HWANG, NOGUCHI or EBARA in the

manner suggested in the outstanding Office Action; and thus the outstanding Office Action has not established a *prima facie* case of obviousness. It is therefore respectfully requested the rejections in view of HWANG, NOGUCHI and EBARA be withdrawn for this additional reason.

Amendments to the claims

In addition, claims 1-8 and 10-17 are amended to correct minor informalities, to better conform to standard claim drafting practice, and not to recite "means-plus-function" terminology in view of 35 USC § 112, sixth paragraph. It is believed no new matter is added by these amendments to claims 1-8 and 10-17.

Conclusion

Entry and consideration of the present Response and allowance of the present application and all of the pending claims therein are respectfully requested and are now believed to be appropriate. Applicant has made a sincere effort to place the present application in condition for allowance and believe that they have now done so.

Any amendments to the claims which have been made in the present Response, and which have not been specifically noted as made to overcome substantive rejections in view of the cited art, should be considered to have been made for a reason unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions, the Examiner is respectfully invited to contact the undersigned at the below-listed telephone number.

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